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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/607,823 | 06/27/2003 | Paul Leblans | 27500-161 | 8419 |

7590

09/06/2005

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| EXAMINER |
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GAGLIARDI, ALBERT J

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| ART UNIT | PAPER NUMBER |
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2878

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--------------------------------------|--|
| Office Action Summary | Application No. 10/607,823 | Applicant(s) LEBLANS, PAUL | |
| | Examiner Albert J. Gagliardi | Art Unit 2878 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Comment on Submissions

1. This action is responsive to submissions of 9 October 2003.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A (1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 33-60 provide for the use of a storage phosphor panel, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 33-60 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a

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process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 29-30 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hell et al.* (US 2001/0007352 A1) in view of *Homme et al* (US 2001/0030291 A1) and *Okada et al.* (US 2002/0162965 A1)

Regarding claims 1-2, *Hell* discloses a binderless storage phosphor panel or screen comprising a vacuum deposited phosphor layer (par.0020) of CsBr:Eu (par.0031) on a support wherein the support includes a layer of, for example glass or aluminum material (par.0043).

Regarding an amorphous carbon support, although not specifically disclosed, those skilled in the art appreciate supports such as amorphous carbon as well known in the art (see for example *Homme* at par. 0041). Therefore, absent some degree of criticality, the use of a carbon support would have been an obvious design choice in view of the known functional equivalence thereof. In addition, *Okada* discloses that amorphous carbon has advantages over aluminum and glass in that it has low absorption (and consequently low backscatter), good medicine resistance, and high heat resistance (par. 0009-0014).

Regarding the concentration of Eu versus CsBr, *Hell* discloses a specific example wherein the Eu concentration is on the order of 800 ppm (par. 0050) and that the Eu

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concentration can vary over several orders of magnitude (see for example par.0038 wherein the ratio maybe in a range of 10^{-3} to 5 mol %), which suggests a range that encompasses the recited range of 100 to 400 ppm or 100 to 200 ppm. As such, Eu concentrations in the range of 100 to 400 ppm or 100 to 200 ppm as considered obvious design choices within the skill of a person of ordinary skill in the art depending on the needs of the application.

Regarding claims 29-30, the method as recited according to claims 29-30 is suggested by the apparatus as suggested by *Hell*, *Homme*, and *Okada* as applied above, and are rejected accordingly.

Regarding claims 33-34, as best understood, the use of storage phosphor panels and screen are well known for use in a variety of medical imaging applications including mammography.

9. Claims 3-28, 31-32 and 35-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hell*, *Homme*, and *Okada* as applied above, and further in view of *Willems et al.* (US 5,736,069).

Regarding claims 3-20, *Willems* discloses that substrates for storage phosphor panels may include a variety of auxiliary and additional layers including polymeric layers and reflective aluminum layers and wherein the additional layers may be formed as interlayers and/or backing layers on the substrate (col. 5, line 52 to col. 6, line 9). *Willems* teaches that such layers may be used for a variety of purposes including improving bonding, sensitivity, sharpness etc. (col. 5, lines 52-58). Those skilled in the art also appreciate that the provision of additional layers for strength, protection, scratch resistance, anti-static and anti-friction purposes are also well known. Therefore the use of additional layers including a polymeric layer, a reflective aluminum layer and/or a protective layer would have been an obvious design choice in order to improve

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operation of the storage phosphor panel. Absent some degree of criticality, the particular thickness of any of the layers would be a matter of routine design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application.

Regarding claims 21-28, *Okada* further discloses the use of protective layers comprising parylene (par.0079). Absent some degree of criticality, the use of parylene C, D or HT is view as a matter of routine design choice.

Regarding claims 31-32, *Willems* further suggests the use of a specularly reflective aluminum layer (col. 6, line 1-2). Absent some degree of criticality, the order at which the aluminum layer is deposited is viewed as a matter of routine design choice depending on the needs of the application.

Regarding claims 35-60, as best understood, the use of storage phosphor panels and screen are well known for use in a variety of medical imaging applications including mammography.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (571) 272-2436. The examiner can normally be reached on Monday thru Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Albert J. Gagliardi
Primary Examiner
Art Unit 2878

AJG